

BACTERIAL LEAF SPOT OF IXORA

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Ixora coccinea is an evergreen, tropical flowering shrub native to the East Indies (2). It is grown in the southern half of Florida as a hedge and for its beautiful clusters of showy flowers. During 1969 a new disease was observed on *Ixora* caused by a bacterium identified as *Xanthomonas maculifoliigardeniae*. This bacterium was originally described as causing a leaf spot on *Gardenia* (1), which along with *Ixora* is in the family Rubiaceae.

SYMPTOMS. The first symptoms of infection are circular, light green spots on the very young leaves (Fig. 1A). The lesions soon develop water-soaked centers, but with age the centers become brown, dry, and necrotic. Several lesions may coalesce to form large necrotic areas with irregular yellow halos and cause leaf distortion (Fig. 1B).



Fig. 1. Leaf spot of *Ixora coccinea*, caused by *Xanthomonas maculifoliigardeniae*: A) light green spots with water-soaked centers; B) brown necrotic spots and leaf distortion.

CONTROL. Both copper-maneb at the rate of 3 lb fixed copper sulfate (53% metallic) 4- -1% lb Dithane M-45 per 100 gal water, and Agri-strep (21.2% streptomycin sulfate) at % lb per 100 gal water, provided a moderate level of control, but not complete control (3). Sanitation involving the use of disease free plants should help "reduce or eliminate the disease.

Literature Cited

1. Ark, P. A. and J. T, Barrett. 1946. A new bacterial leaf spot of greenhouse-grown gardenias. *Phytopathology* 36:865-868.
2. Graf, A. B. 1959. *Exotica II*. Roehrs Co., Rutherford, N.J. 1146 p.
3. Miller, J. W. 1970. Bacterial leaf spot of *Ixora* caused by *Xanthomonas* sp. *Phytopathology* 60:1304 (Abstr.)